## REMARKS

Applicants appreciate the Examiner's thorough consideration provided in the present application. Claims 25, 26, 28-36 and 42-46 are now present in the application. Claims 25, 26, 28, 29, 32-34, 36 and 44 has been amended. Claims 25 and 44 are independent. Reconsideration of this application, as amended, is respectfully requested.

### Rejection Under 35 U.S.C. § 101

Claims 25, 26, 28-36 and 42-46 stand rejected under 35 U.S.C. § 101 because they allegedly are directed to non-statutory subject matter. Applicants traverse the rejection as set forth herein.

With regard to independent claim 25, it is noted that claim 25 is an apparatus claim and therefore MPEP 2106 regarding a process cited by the Examiner on page 5 of the Office Action does not apply to claim 25. Also, on page 6 of the Office Action, the Examiner asserts that the claims must result in a physical transformation or provide a "particular machine" for execution; however, it should be noted that these criteria can only be applied to a method claim. In this case, claim 25 is directed to "a printed circuit board design instruction support device" which is an apparatus claim and therefore, the Examiner's assertion is not appropriate. In addition, Applicants respectfully submit that means plus function limitations recited in claim 25 are inherently met by structures recited in the Specification, which is directed to statutory subject matter.

With regard to independent claim 44, to expedite prosecution, claim 44 has been amended to include the recitation of "using a computer to execute the following steps" which is supported by the Specification as original filed. Applicants respectfully submit that claim 44 now meets the criteria of "a particular machine."

Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**Claim Rejections Under 35 U.S.C. §§ 102 and 103**

Claims 25, 26, 32, 36, 42 and 44-46 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Geppert, "IC Design on the World Wide Web", (hereafter "Geppert"). Claims 33-35 and 43 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Geppert. Claims 28-31 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Geppert in view of Kundert, "Power Supply Noise Reduction" (hereafter "Kundert"). These rejections are respectfully traversed.

A complete discussion of the Examiner's rejections is set forth in the Office Action, and is not repeated herein.

Without conceding to the propriety of the Examiner's rejection, but merely to timely advance the prosecution of the application, as the Examiner will note, independent claims 25 and 44 have been amended to more clearly define the present invention over the references relied on by the Examiner, respectively.

In particular, independent claims 25 now recites a combination of elements including "means for reading a circuit diagram designed by the circuit design; means for storing *design instruction information regarding the printed circuit board design and keywords, which are associated with said design instruction information and set corresponding to the type of items included in said circuit diagram*; and means for extracting keywords corresponding to the type of items included in the read circuit diagram and *automatically displaying design instruction information associated with the extracted keywords*, when the circuit diagram is read by said reading means, *wherein said design instruction is made up of design implementation information showing information whether or not a circuit board designed was performed according to a design instruction and printed circuit board design instruction support implementation information to which check result information of printed circuit board design instruction support is input, and said storing means is database in which design instruction and said keywords are listed in a divided manner*." Support for this amendment may be found at least at, for example,

Fig. 2 and page 22, line 4 through page 27, line 1 of the Specification as originally filed. Thus, no new matter has been added. Applicants respectfully submit that the combination of elements set forth in claim 25 is not disclosed or suggested by the references relied on by the Examiner.

Specifically, on page 2 of the Office Action, the Examiner in section iii) asserts that Geppert in Figs. 4 and 5 teaches "displaying design instruction information corresponding to a circuit diagram." However, as set forth in amended claim 25, the design instruction information of the present invention is made up of "design implementation information showing information whether or not a circuit board designed was performed according to a design instruction and printed circuit board design instruction support implementation information to which check result information of printed circuit board design instruction support is input." By contrast, Figs. 4 and 5 of Geppert asserted by the Examiner merely teaches "displaying a result of electric power analysis performed to a user's circuit" or "information regarding selected parts including price or use possibility." It is noted that Geppert nowhere teaches displaying the **design instruction information** "made up of design implementation information showing information whether or not a circuit board designed was performed according to a design instruction and printed circuit board design instruction support implementation information to which check result information of printed circuit board design instruction support is input" as recited in claim 25.

Further, the Examiner in section iv) asserts that Fig. 5 of Geppert teaches that a user can click on any component or part and information is brought up graphically pertaining to the part represents the automatic display of information as well as keywords. Applicants respectfully disagree. Referring to page 48 of Geppert, it is merely recited that "when search is performed by keywords, articles hit by the keywords become browsable"; however, Geppert provides no explanation as to what kind of articles are hit when what kind of keywords are input. Further, it is apparent that such keywords in Geppert are "keywords" input by the user for search article; on the contrary, the "keywords" of the present application are *associated with said design instruction information and set corresponding to the type of items included in said circuit diagram.* It is clear that the keywords mentioned in Geppert cannot be comparable with the

keywords set forth in the present invention. Therefore, Applicants respectfully submit that Geppert fails to teach or suggest "storing design instruction information regarding the printed circuit board design and *keywords, which are associated with said design instruction information and set corresponding to the type of items included in said circuit diagram*", "automatically displaying *design instruction information associated with the extracted keywords*" and "said storing means is database in which *design instruction and said keywords are listed in a divided manner*" as recited in claim 25.

With regard to the Examiner's reliance on Kundert, this reference has only been relied on for its teaching against some dependent claims. It is submitted that Kundert also fails to disclose the above-mentioned features set forth in claim 25, and thus fails to cure the deficiency of Geppert.

Since Kundert and Geppert, either taken alone or in combination, fail to teach each and every claimed feature as recited in claim 25, Applicants respectfully submit that claim 1 clearly defines over the teachings of the references relied on by the Examiner. With regard to independent claim 44, it is submitted that amended independent claim 44 also clearly defines over the teachings of the references relied on by the Examiner for at least the same reasons as claim 25.

In addition, claims 26, 28-36, 42, 43, 45 and 46 depend, either directly or indirectly, from independent claims 25 and 44, and are therefore allowable based on their respective dependence from independent claims 25 and 44, which are believed to be allowable, as well as for the additional novel features set forth therein.

For example, with regard to claim 26, this claim recites "said displaying means displays keywords corresponding to the type of items included in the read circuit diagram when the circuit diagram is read by said reading means, and said displaying means simultaneously displays said design instruction, said keywords, said items, said design implementation information and said printed circuit board design instruction support implementation information in a list." The

Examiner on page 3 asserts that following the broadest reasonable interpretation of the claimed limitation, the use of keywords in Geppert reads on the limitations presented. Applicants respectfully disagree. It should be noted that claim 26 positively recites "keywords corresponding to the type of items included in the read circuit diagram when the circuit diagram is read by said reading means." However, the keyword in Geppert clearly merely refers to merchandise information which is totally different the keyword of the present application. In addition, Applicants respectfully submit that Geppert nowhere teaches "said displaying means simultaneously displays said design instruction, said keywords, said items, said design implementation information and said printed circuit board design instruction support implementation information in a list" as recited in amended claim 26. For this additional reason, claim 26 clearly defines over the references relied on by the Examiner.

With regard to claim 33, this claim includes the recitation of "*means for highlighting regions of selected items* on the printed circuit board diagram read by said reading means, which correspond to items selected by said selection means, *by displaying in an enlarged manner when the items are selected by said selection means, and highlighting only items associated with the keywords on said printed circuit board diagram read by said reading means,* which corresponds to keywords selected by said selection means, *when the keywords are selected by said selection means, in performing cross-probe.*" The Examiner on page 3 of the Office Action asserts that page 49 of Geppert teaches this feature; Applicants respectfully disagree. A careful review of page 49 of Geppert, Geppert merely describes associating a circuit with data and software capable of creating a circuit substrate while communicating on the Internet, but Geppert does not teach displaying them in a highlighted manner.

On the contrary, however, in the present application, highlighting items in performing cross-probing as illustrated in Fig.10 and the corresponding disclosure of the present application, characterized that items are highlighted such that "selected items are displayed in a highlighted manner on a circuit diagram and a substrate diagram", which is entirely different from the teachings of Geppert. Therefore, in view of the amendments made to claim 33, Applicants respectfully submit that claim 33 clearly defines over the references relied on by the Examiner.

With regard to claim 36, it is recited "means for managing whether or not a printed circuit board design was performed according to said design instruction information, by accepting the input of a result in which said design instruction information was reflected on the printed circuit board design and *accepting an agreement* to said result, wherein said result is identifiably displayed on a display screen while the color and/or brightness of said items are changed, and the device is capable of simultaneously displaying areas to be checked on both of a circuit diagram and a printed circuit board layout diagram for each circuit part." The Examiner merely simply asserts that Fig. 1 of Geppert teaches claim 36; Applicants respectfully disagree. Fig. 1 of Geppert merely shows the universities are linking up to develop internet-capable tools ad procedures for all phases of computer-aided design. It is clear this figure of Geppert has nothing to do with "means for managing whether or not a printed circuit board design was performed according to said design instruction information, by accepting the input of a result in which said design instruction information was reflected on the printed circuit board design and accepting an agreement to said result." Applicants respectfully submit that the Examiner's assertion is merely based on the word "verification" appearing in the description of Fig. 1 of Geppert without any other explanation of the rejection, which is not appropriate.

Further, on page 4 of the Office Action, the Examiner points out that Applicants in the last Reply did not explain how the "authentication" mentioned in Geppert is different from the limitation recited in claim 36. In view of this, claim 36 has been amended to recite "*accepting an agreement* to said result" which is referring to discriminating whether or not designed item is performed according to a design instruction as set forth in the present specification, which is clearly different from the phrase of "authentication" mentioned in Geppert referring to allowing to use.

Accordingly, Applicants respectfully submit that Geppert in fact fails to teach or suggest "means for managing whether or not a printed circuit board design was performed according to said design instruction information, by accepting the input of a result in which said design instruction information was reflected on the printed circuit board design and accepting an agreement to said result, wherein said result is identifiably displayed on a display screen while

the color and/or brightness of said items are changed, and the device is capable of simultaneously displaying areas to be checked on both of a circuit diagram and a printed circuit board layout diagram for each circuit part" as recited in claim 36.

The Examiner is respectfully reminded that "the identical invention must be shown in as complete detail as is contained in the ... claim." (MPEP2131.02). It is axiomatic in U.S patent law that, in order for a reference to anticipate a claimed structure, it must clearly disclose each and every feature of the claimed structure. Here, it is obvious that claim 36 clearly defines over the references relied on by the Examiner for these additional reasons.

In view of the above amendments to the claims and remarks, Applicants respectfully submit that claims 25, 26, 28-36 and 42-46 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

## CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

By _____

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Attachment: Clean version of amended claims